



Partners for Water and Sanitation

Note on project reports

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Partners for Water and Sanitation

**Business Planning, Asset Management, Drinking Water
Safety & Change Management: Technical Assistance**

Visit Summary Report

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Contents

1	Executive Summary	1
2	Introduction	1
2.1	Background.....	1
2.2	Terms of Reference.....	2
3	Planned Itinerary	3
4	Discussion Group Summary	5
4.1	ANSWC.....	5
4.2	WCAs.....	7
5	Workshops.....	9
5.1	Day 1.....	9
5.2	Day 2.....	10
5.2.1	Asset Management Quiz.....	10
5.2.2	Business Planning Interactive Session	12
5.2.3	Water Safety Planning	13
5.2.4	Change Management	14
6	Recommendations	15
7	Conclusions and Next Steps	18

1 Executive Summary

2 Introduction

2.1 Background

Partners for Water and Sanitation (PfWS) works with developing countries providing knowledge and expertise to help them supply clean water and adequate sanitation to their population. An innovative not-for-profit initiative, the partnership has members from three sectors: government, private enterprises ranging from water companies to engineering groups, and Non-Governmental Organisations (NGOs) such as WaterAid, Tearfund and a trade union.

This allows the partnership to draw from a wide range of expertise to rapidly respond to each unique challenge in order to help local African partners develop and strengthen capacity, and build truly sustainable solutions.

Each partner brings a unique set of skills and expertise. These are matched with a wide range of potential needs identified with partnering countries at a national or local level, working alongside their existing water and sanitation programmes.

The emphasis of partner involvement is on-the-ground capacity building, such as knowledge transfer, to ensure the sustainability of each project and to encourage any lessons learned to be shared and used again throughout the region.

'And it's not just about engineering: corporate, institutional and financial capacity building is also required. While the initiative does not itself provide funding, it often strengthens each locality's ability to identify and access available sources through the capacity building approach.'¹

¹ From the Partners for Water and Sanitation website: <http://www.partnersforwater.org/>

2.2 Terms of Reference

The European Commission and the Federal Government of Nigeria agreed in December 2004 to support the implementation of the Water Supply and Sanitation Sector Reform Programme (WSSSRP) in Nigeria. The specific objective of the WSSSRP is to increase access to safe, adequate and sustainable water and sanitation services in six focal states: Anambra, Cross River, Jigawa, Kano, Osun and Yobe.

The Programme implementation framework for each of the six focal states consists of:

- A Programme Management Unit (PMU)
- A State Technical Unit (STU)²
- The Rural Water Supply and Sanitation Component

The overall objective of Partners for Water and Sanitation support projects in Anambra is to improve the capacity of water and sanitation organisations and stakeholders in Anambra state for efficiency, effectiveness, and sustainability in water and sanitation services.

The Terms of Reference for this part of the Partners for Water and Sanitation project are for support to the STU in Anambra State and the Anambra State Institutions for Water Supply and Sanitation, particularly in the areas of Business Planning, Asset Management, Water Safety Planning and Change Management. The previous visit by Rodney Anderson and Ben Caulfield in July 2009 covered Policy and Regulatory support, whilst introducing concepts such as risk management that would be developed further in this visit.

The sector reform strategy is hinged on sustainability of service delivery, and is focused on independence and effectiveness of service providers. The service providers are expected to run as a business. Hence, the Anambra State Water Corporation (AnSWC) and the Water Consumer Associations (WCAs) will need business process and business planning skills, to help build a road map for each organisation, towards sustainable service provision. The basics of business processes and planning, plus its appreciation by the management team and staff of each organisation is critical at this point.

² The STU is responsible for implementing the programme's activities in the state, with specific focus on small towns and urban areas

Previous sector assessment exercises have identified the lack of a robust Asset Management as one of the contributing factors leading to the collapse of water supply systems in the state. Asset Management Plans provide important supporting information for the development of Business Plans, and act as tactical documents to deliver asset related strategy relating to supply provision. Insufficient Asset Management processes lead to inefficient use of business resources and fail to consider the longer term implications of asset based decisions. Strong Asset Management processes demonstrate that external investment in an organisation will deliver the desired levels of service through good asset stewardship.

This part of the Partners for Water and Sanitation project delivers Milestones 8 and 12 of the Terms of Reference for Anambra Organisational Strengthening. It also delivers Activity 2.6 of the Partners for Water and Sanitation Support Plan for the Anambra STU Programme 2009/10.

The objectives for this visit were to support Anambra state water service providers; the state water corporation, the small town's water consumers associations, and the sector reform team in the development of guidelines for:

- Effective Business Development Processes for water supply services
- Asset Management frameworks and planning
- Water Safety Planning

This document aims to provide a summary of the in-country assistance provided and give high-level recommendations with regards implementing the processes introduced over the course of the week. The material presented is included within the document and is considered the principle technical output for this visit.

3 Planned Itinerary

The original itinerary in Awka, Anambra is detailed below:

Day 1 - (Sunday 20th)

- Arrival and reception
- State briefing
- Project briefing
- Programme (itinerary) update

Day 2 - (Monday 21st)

Introductions and familiarization with key State officials and stakeholders
Understanding of the Water and Sanitation sector reform
Discussions on expectations
Appreciation of activities and plans to date

Day 3 – (Tuesday 22nd)**Appreciating the status of Business Development, Asset Management, and Safety Plans**

Group Discussions (Water Consumers Associations)
Group Discussions (Anambra State Water Corporation)
Group Discussions (the Policy and Legislative levels)

Day 4 - (Wednesday 23rd)**Technical Sessions with AnSWC, MPUWRCD³, RUWASSA⁴, WASH⁵ units & WCAs**

Business Development in the Water sector
Asset Management in the Water sector

Day 5 - (Thursday 24th)**Technical Sessions (continue)**

Drinking Water Safety Planning
Exercises on technical sessions
Action Planning sessions

Day 6 – (Friday 25th)

Departure

Unfortunately, due to the late declaration of public holidays on Monday 21 and Tuesday 22 September we had to amend our plans. We delayed our travel to Awka by one day, which enabled us to have more preparation time for the Technical Workshops, although we did miss the chance to meet with the key political figures in the State. However, we did have the opportunity to meet the Governor of Anambra State who happened to be travelling on the same flight from Abuja to Enugu.

³ Ministry of Public Utilities, Water Resources and Community Development

⁴ Rural Water Supply and Sanitation Agency

⁵ Water, Sanitation and Hygiene [units]

We are very grateful to the members of staff from AnSWC, and the members of various WCAs and CSOs who took time out of their holiday to meet with us on the Tuesday.

The Technical Sessions went ahead as planned, although we did add a session on Change Management to the second day.

4 Discussion Group Summary

4.1 ANSWC

This first group discussion took place on the morning of the 22nd September, and despite being a public holiday was attended by around ten key people from the ANSWC including a Deputy Director, the acting General Manager and the Chief Technical Officer. Following brief introductions from the Partners for Water and Sanitation team, the session was initially left open for the Corporation staff to update the team on the current position of the organisation. This section aims to summarise the findings and salient points of these discussions.

It was immediately clear that the Corporation staff were disappointed at the current status of the organisation, which was summarised to be effectively ‘non-operational’ despite around 600 people still officially being employed by the organisation (following natural reductions due to retirements and deaths). All of these staff are currently unpaid, with no support from the State government who seem unhappy with the Corporation in its current form; Corporation staff indicated that the government wish to create a new Corporation based around foreign investment (potentially Jordanian). A Draft Policy has been created which indicates widespread phasing out of the publicly owned corporations, to which the ANSWC have officially objected in public consultations. There did not appear to have been any consideration of the potential opportunities for the staff to influence any new organisation if implemented.

It was identified that a Business Plan had been created by the organisation, which was promised to the Partners for Water and Sanitation team at the meeting and was received the following day. This document had been sent to the Government, but the Corporation had received no response. The Corporation staff were clearly dismayed at this situation, and had not picked up the potential opportunity to influence Government through improved Business Planning and demonstration of good asset stewardship.

From 1994, the Corporation had been encouraged to operate as a business using the income generated from tariffs rather than being funded directly from Government. Further discussion indicated that this was initially considered a sustainable proposition with the income generated by tariffs at that time provided sufficient resource to maintain assets in a functioning condition. However, the tariffs charged by the Corporation are defined by the Government, and gradually reduced over this period to such a level that it was not possible to pay staff and maintain assets further. Salaries were stopped in 2000. When fully functioning, the Onitsha Water Scheme provided around 90% of revenue to the Corporation, but is now defunct with no capital available to maintain or refurbish the assets. It was, however, clear that the Corporation was once a viable business.

The deterioration of assets was claimed to be gradual, linking to the reduction of tariffs over time. Initially, assets were cannibalised as available resource ran low. Whilst the civil assets are still claimed to be in reasonable condition given their relatively young age, as expected it was the mechanical and electrical equipment that had reached the point of failure and following a significant period of disuse is now expensive to rehabilitate.

Questioning on maintenance regimes indicated that this was largely done on a 'fix on fail', reactive basis. However, a basic example of proactive maintenance (albeit of an operational nature) based on the monitoring of asset condition and performance was provided with regards the periodic cleaning of river intakes to prevent reductions in intake efficiencies. Since such schemes have fallen into disuse, these same river intakes are now buried beneath high volumes of river sediment. Crucially, from an Asset Management planning perspective, operational logs had been kept by the Corporation that outlined when maintenance activities had taken place to guide future planning as to asset failure frequencies, modes and identification of key 'problem' assets.

Another key problem identified through the discussions involved the digging up mains and pipelines by other utilities or road builders, usually due to the expansion of single carriageways to support more traffic. This highlighted problems in the processes of communication between different utilities, as well as a lack of contractual clauses or performance conditions to prevent such problems or enforce any legal accountability.

There is currently only one functioning scheme operated by the Corporation in Anambra following rehabilitation, comprising three boreholes supplying approximately 2Ml/d. From a peak

of 16,000 customers, there is now only one connection to an Army base, the only source of income to the organisation (ad-hoc payments of ₦80,000, on average monthly). The water previously supplied by the Corporation to customers is now supplied by water vendors at much greater cost per unit volume.

Despite all the aforementioned challenges, a promising option arose from the discussions on the current asset base, customer connections and tariffs. A test case to supply two communities via WCA networks showed the potential for the Corporation to act as a bulk supplier. This would enable the Corporation to focus on the reliable supply of water, whilst greatly simplifying the billing process and associated overheads. At the same time, this would also potentially decouple the corporation from the specific 'per property' tariff constraints. This discussion of the ANSWC and WCAs working in tandem provided a useful opportunity to build upon in the workshops. The session therefore closed on an extremely positive note, with Corporation morale visibly lifted.

4.2 WCAs

The WCA discussions took place in the afternoon following those with the ANSWC. Attendance was high, although the distance travelled by some resulted in late arrivals and a less coherent group discussion than with the ANSWC. Attendees included the WCA Chairmen within Anambra state. The session followed a general format whereby each WCA outlined their current organisation size and asset/supply status. The commentary below aims to provide the salient points from these discussions.

Most of the WCAs comprised of around 10-15 people, with a largely balanced ratio between male and female staff in the organisation. Initial discussion highlighted strong discontent with the political management of the water supply sector and interference largely felt to have 'destroyed' systems operated by the Corporation. Issues regarding the destruction of pipes and mains by third-parties were also reiterated from discussions with the ANSWC, without which it was felt that many more customers would have been connected to the existing systems.

The WCAs presented a consistent message to that discussed with the ANSWC with regards the relative positioning of the two organisations. The ANSWC was seen very much as a supplier of the 'product' itself, whereas the WCAs felt their role was predominantly in the distribution of water from a bulk supply point. Whilst no contracts have been put in place, such proposals are currently held in meeting minutes. Individually, however, the situation was widely different

between each WCA, with some controlling newly built assets from source to customer and others with no assets built to date.

A general pricing structure was presented as a model:

- ₦3500 for a connection to the supply network
- ₦150 per m³ supplied to customers
- ₦100 per m³ charged by ANSWC to the WCA (bulk supply)

Through the above arrangement it was seen that ‘everyone benefitted’, however, a key challenge was the metering of customers to meet such a tariff structure. It was not clear whether the cost of metering would be met by the consumer or the WCAs. Unauthorised connections also clearly presented a key challenge for the WCAs in terms of policing and tariff setting. Some WCAs, however, had developed assets, but as of yet had not defined a suitable tariff structure.

As aforementioned, several WCAs had reached the point where they had assets on the ground, albeit at different stages of operation. The creation of assets was undertaken by contractors, of varying quality. The Partners for Water and Sanitation team stressed the importance of ensuring operational and maintenance manuals were supplied as part of any project, along with system diagrams and technical drawings. The WCAs felt they did not have enough power to object to the ‘signoff’ of work deemed be of poor quality or which was incomplete (no manuals or system diagrams), and therefore reduced the ability to act as Asset Owner or project sponsor. For those WCAs who were still to get water into supply, there was clear frustration at a lack of assistance from the government. Several WCAs had distribution assets in place, but were limited by the lack of water sources to feed these networks, again reiterating the potential partnership with the ANSWC.

The WCAs felt that the communication by the WSSSRP team was very good, although there was some confusion as to how the Partners for Water and Sanitation workshops related to the WSSSRP activities. However, this was cleared up following explanation of the aims of the mission by the country manager. Following this summary there was a clear interest in the workshop material to be presented over the next two days. The relative positioning of the WCAs and ANSWC allowed for adjustment of the workshops to target the audience appropriately and to implement relevant examples (particularly with respect to Asset Management) to both organisations.

5 Workshops

5.1 Day 1

The first workshop day predominantly comprised of the presentation of training material from the UK partners, interspersed with brief audience recaps and directed commentary on applicability to the Anambra situation where appropriate from the country manager. The reasoning for the 'delivery heavy' first day was the result of time constraints.

The presentations over the course of the two workshop days were structured to follow a logical order to reflect different levels of planning, from the strategic level (Business Planning), to the tactical (Asset Management). All presentation material is covered within the Appendices of this document.

The first day comprised of the following sessions:

1. What is a Business? (Chris Underwood): Introduced the concept of a business, the factors which influence businesses and what resources businesses may have. Different types of organisational structures, functions and business outputs were also covered.
2. Introduction to Planning (Chris Underwood): The reasons for planning were covered, along with a summary of the key pitfalls. The different levels and types of planning were covered, with reference to the material to be presented later in the day. A generic planning process model was presented, with specific comparison of strategic Vs tactical planning.
3. Business Planning (Chris Underwood): Linking to previous business and planning material, this session demonstrated the need for business planning and introduced a template for a typical business plan. Detail was provided as to the different sub-elements within a Business Plan, such as Marketing, Financial and Operational plans.
4. Asset Management (Mark Smith): Starting from the definition of assets, the asset lifecycle and the benefits & needs for undertaking Asset Management, a summary of the planning process was delivered. The importance of data collection and management was stressed. The use of data was built upon by introducing the principles and processes for different elements of an Asset Management Plan, including demand

forecasting and the consideration of asset failure in the development of asset condition and maintenance strategies. An example plan template was presented, along with general guidance on implementing and improving Asset Plans.

The material presented is located within Appendix **Error! Reference source not found.**, with further reference material suggested in Appendix **Error! Reference source not found.**.

Following the Business Planning presentation there was a brief questions and comments session. One of these asked for more definition on promotional plans in a Business Planning context and as to how this applied to the water sector, the second brought about discussion on the relationship between reduced supply and resulting overheads. The Asset Management presentation brought about no specific questions on the material, but there were several comments about the difficulties faced in Anambra state and a clear division of the audience in terms of morale. This latter, emotional closedown session demonstrated the importance of the Change Management session covered in Day 2. Given the strong presentation focus of the first day, much consideration was given in the evening to tailor the more interactive second day to these experiences.

5.2 Day 2

5.2.1 Asset Management Quiz

Given the introduction of wide-ranging, complex Asset Management principles and processes delivered to a diverse audience in terms of responsibility and technical ability it was considered crucial to undertake a check as to audience understanding. To this end, a series of questions were developed to test audience understanding in a ‘no wrong answers’ style session. This was delivered by the relevant UK partner and the country manager.

The following questions were posed to the audience, in order:

- What is the definition of an asset?
- What is the goal of asset management?
- Why do asset management?
- Is it best to undertake proactive or reactive maintenance? (*NB. This question was a slight trick in its phrasing, as the optimal solution is usually a combined approach*)
- What process might you use to assess data availability and quality?

- What aspects might Level of Service cover?
- What do we need to monitor towards defined Levels of Service?
- What factors influence demand?
- What should we do to ensure the asset life is achieved?
- What do we mean by failure mode and effect?
- How do we prioritise maintenance?
- What do we mean by the Asset Owner?

There was a high degree of audience participation in this session, of which the general standard of answers was very good, showing a large amount of audience understanding of the material delivered and distributed. Even more pleasing was the fact that answers were relatively evenly spread amongst the different organisations, whereas the expectation had been that ANSWC would have had a greater understanding based on the depth of their practical experience.

The UK partner only had to input to the ‘failure mode and effect’ and ‘maintenance prioritisation’ questions, the former of which was particularly challenging and an example of advanced asset management techniques to aspire towards. In this case practical examples were reiterated. As an example of an advanced Asset Management technique with respect to full embedment in the planning and decision making process, it was stressed that it was the principle and thought process at this stage that needed to be understood to develop initial plans. For the maintenance question, guidance was given that this should be prioritised based on both cost-effectiveness and risk (example process flow diagram included within presentation material).

Based on the answers provided, the following salient points should be noted:

- Levels of Service and Performance Targets need to be *realistic*. Aspirations to achieve 24-hr service, all of the time demonstrated the strong drive of the audience to improve, but asset failures will happen so it would be unfair to commit to such targets. Consideration should also be given as to what happens when failure occurs, for example, time to rectify supply interruptions or the number of interruptions beyond a defined threshold.
- The most cost-effective maintenance strategy is likely to be a combination of proactive and reactive measures tailored dependent upon the type of asset and the information available

5.2.2 Business Planning Interactive Session

5.2.2.1 Feedback

The following questions were presented in two sessions. The workshop participants were divided into organisational groups: AnSWC; two WCA groups; CSOs and community organisations; Ministry and other government organisations.

The groups were given about 20 minutes to agree their answers and prepare their feedback to the workshop.

- What is your business?
- Where are you now?
- Where would you like to be?
- Where do you have to be?
- What is your vision?
- Where will you be in 2015?
- What would be your mission statement?
- What are your current objectives and goals?
- Are any of your objectives set for you?

- What is the current size of your market?
- What is the current income from your market?
- How do you supply your current market?
- What is the potential size of your market?
- What is the potential income?
- How will you supply your potential market?
- Who has any information that you might need to help you?

5.2.2.2 Outputs

All groups responded very positively to the questions and there were some very animated discussions in some of the groups. Encouragingly the groups comprising of CSOs and government staff, although unlikely to be formed into business units in the future, presented some very clear ideas of their potential roles.

The responses presented by the groups were collated by WSSSRP staff for transcription and are included in the Appendices of this document.

5.2.2.3 Critique

Most responses were as expected, however, the degree of detail and forward thinking from all groups was worthy of note. The objective of this session was to introduce the concepts associated with business planning in the real world and allow the workshop participants to begin that process within their respective organisations.

The other benefit was the realisation of most participants that any planning they undertake should not be done in isolation and that future potential scenarios would require most or all the groups to plan and work more closely together.

Having introduced the concepts and encouraging the groups to begin the process of business planning, it is vital that any momentum gained is not lost and that this workshop be followed up with encouragement to produce a first draft of a business plan.

5.2.3 Water Safety Planning

The delivery of the Water Safety Planning presentation drew strongly upon material delivered within previous workshops covering the basic principles of risk management and the common planning themes of the previous two sets of material. Given the type of material, several audience interactive sessions were set within the material. The linkages between Water Safety Plans and Asset Management Plans were highlighted, particularly in terms of using similar risk-based approaches to prioritise and consider options & actions with respect to other types of customer impacts or asset failure. The presentation material is also contained within the Appendices of this document.

Following a brief introduction to highlight the importance of drinking water safety the audience was invited to give examples of drinking water related hazards, of which the vast majority of principle examples were identified. Similarly, audience understanding of typical control measures was clearly evident. Based on the interactive element of the presentation it is considered that the relevant expertise and knowledge is possessed by each organisation to develop the relevant plans and deliver improvements on the ground.

The audience was informed of the availability of further material on the World Health Organisation website, including the Water Safety Planning Manual from which much of the core presentation material was based. For those without internet access the WSSSRP will be the key contact for this information.

Due to time constraints, group exercises to score risks using qualitative and semi-quantitative methods were not completed. It is therefore recommended that this is used in any further sessions organised by the WSSSRP. In order to develop Water Safety Plans promptly, allowing identification of key priorities for action and practical control measures (for inclusion in operational and asset plans), it was recommended that the use of qualitative scoring is used initially. It was also commented that future use of semi-quantitative be tailored to the Anambra situation, of which a good starting point is included at the back of the presentation slides (from the World Health Organisation (WHO) Water Safety Planning Manual).

5.2.4 Change Management

The Change Management section briefly introduced the concepts of integrated business change, using the 'Business Diamond' approach; the emotional cycle of change and the various change management approaches that can be adopted.

The content of the presentation was drawn heavily from a change management training package developed by Corven (Management Consultants).

The participants immediately identified with the emotional cycle, with positive feedback from all organisations.

Although only short in length and covering the introductory aspects of Change and Change Management, this session seemed to strike a chord with the organisations present and many discussions continued after the end of the session.

Given the current position within the water supply sector in Anambra and the ongoing work by WSSSRP it is not surprising that this session gave rise to such a level of interest. Having introduced the concepts behind managing change it would be timely for a follow up session to explore these areas in greater detail be undertaken in the near future.

6 Recommendations

6.1.1.1 General

The danger in providing wide-ranging, yet detailed presentations on topics such as Business Planning and Asset Management where current capability is known to be weak is that the recipient feels they are impossibly far from implementing the required processes. The implementation of such frameworks, structures and processes is one which is an ongoing, cyclical process based on improvement between revision of the plans in question. Some of the practices introduced during the week demonstrate the direction such improvement needs to take, but currently there may be a lack of relevant data, knowledge or resources to implement these in full. The main pointer here is that where these weaknesses are identified, that processes are implemented to develop this capability for the future.

However, the first step is to make a start on developing the plans with what's currently available, which helps in defining future improvements needed for the planning process and develops relevant skills. The most important thing is the thought process followed to produce the plan, not the completion of the actual plan itself. Initial plans will be the building blocks for future activities.

In developing plans it is crucial that objectives, goals and targets are kept realistic, and are kept separate from longer-term aspirations or wishes. For example, during the Asset Management sessions the definition of levels of service was discussed, but organisations promoted '24-hrs a day supply, without interruption' as their desired level of service, something which is not always achieved, even in the UK.

6.1.1.2 Asset Management

In addition to the guidance and recommendations included within the presentation material, the following recommendations are given:

- It is recommended that the overall Asset Management Plan for the organisation is developed through the culmination of individual system Asset or Zonal Plans both to divide workload and to prevent too much detailed asset information being kept within the main summary document. This also promotes a wider organisational input into the Asset Management process.

- The development of Asset Management Plans should initially *prioritise* those areas where there are currently functioning assets (if applicable) to ensure as far as is practical that these schemes continue to operate, deliver the public with the benefits of water supplies and act as a benchmark (and hopefully role model) for other areas or organisations in Anambra. This will also demonstrate good asset stewardship to any current or would be investors (e.g. the government).
- Asset Management processes and planning should not be constrained to currently functioning assets, but should also include those assets yet to be commissioned, created or which are currently out of service. In each of these three cases there is benefit in developing Asset Management Plans:
 - For assets about to be rehabilitated or commissioned, it is crucial that these assets continue to operate sustainably into the future and deliver the benefits to the customers that are expected through the asset life of the scheme. It is therefore essential that each organisation understands the likely capital, operational and maintenance requirements for the assets going forward to ensure that the desired level of service are met in a cost-effective manner. Consideration needs to be made as to what maintenance is reactive or proactive, and to how asset performance & condition will be assessed by the organisation. The same issues apply to currently functioning assets.
 - Where asset creation is needed, but yet to take place, it is crucial that several options are considered for each scheme and that these are compared on a whole life-cycle basis to ensure that the scheme is the most cost-effective and also cost-practical (e.g. it may be better to choose a scheme with a higher initial capital cost, but with lower operational and maintenance costs if this fits the likely income stream of the organisation to ensure sustainability, even if the overall costs are slightly higher). A full options appraisal should take place.

- For assets that are currently out of service, it is important that any existing data and information is captured as to the previous operation, maintenance requirements etc to develop a potential Asset Management Plan. This will enable the organisation to understand why the scheme failed, assist in lessons learnt to apply to currently operating schemes and also to present an effective ‘business case’ for future investment by demonstrating a clear understanding of the requirements for that site in order to achieve good asset management.
- All available data needs to be kept centrally (or a copy kept centrally) in a structured form, with consideration of the asset data hierarchy for future digitisation of data where possible. Priority initially should be given to the identification of existing data and a gap analysis carried out to define future requirements.
- As per the comment in Section 6.1.1.1, the planning process should start immediately with the currently available resource. For example, some advanced techniques were presented in the workshops to provide a wide understanding of Asset Management approaches, such as risk-based analyses of asset failure mode and effect to prioritise asset interventions, yet such techniques will take some time to implement the relevant processes so may be missing from initial plans. Instead consideration of these thought processes should be made in developing the plans (e.g. which assets are critical), along with an understanding of what may be required to implement such analyses in future (e.g. regular assessments of asset condition) to meet this weakness. A basic Asset Management approach is proposed in the presentation material⁶.
- It is crucial that responsibility is given to personnel within each organisation to act as asset owner. In addition to this, there needs to be a clear point of responsibility for the signoff of contractual work so that this includes relevant O&Ms, schematics and to ensure the project delivers the desired benefits. This particularly includes WSSSRP and State projects, where the lack of a ‘signoff’ process was raised in the WCA discussion sessions.

⁶ Based on the Institute of Asset Management ‘International Infrastructure Asset Management Manual’

6.1.1.3 Business Planning

- Follow up the initial thoughts about business planning by encouraging the organisations to produce a first draft of a business plan. Emphasise the fact that not all the information or data required will be available, but identify what may be required and also where such information may be obtained, or if not available who should gather it.
- It may be appropriate to arrange more in depth business planning sessions with individual organisations to assist with the production of a first draft business plan. Given that some of the organisations may end up in a competitive situation, consideration also needs to be given to what level of financial information is subsequently shared with the other organisations.

6.1.1.4 Change Management

- The reaction to the introduction of the concepts around Change Management indicate that there is an immediate need to follow up with more in depth sessions, including staff from WSSSRP. These sessions should be undertaken with individual organisations as the scale and nature of future changes would appear to be organisation dependant.

7 Conclusions and Next Steps

Following discussion sessions with State water providers, an introduction was given to Business Planning, Asset Management, Water Safety Planning and Change Management through the delivery of workshops. These workshops showed a high level of audience participation and interest in the topic material, supported by a good knowledge base within the organisations themselves.

It is critical to build upon this initial momentum through the development of plans based on the material presented as soon as possible. Such plans can then be used as the foundation for future development. It is crucial that there is ongoing dialogue between the different organisations within Anambra to share knowledge and lessons learnt going forward.

The following next steps are recommended:

- The Partners for Water and Sanitation country manager and WSSSRP should check with organisations within ~1 month to ensure that each organisation is developing the relevant plans based on the material delivered, and to drive home the key points & guidance. Clear timescales should be set for completion of these initial plans for review.
- An urgent data collation exercise should take place in each organisation, particularly the ANSWC, to capture historic data relevant to the planning process before these are lost, destroyed etc. For example, operational site logs including historic asset maintenance.
- Upon completion of the draft plans to the timescales agreed, these should be reviewed by UK partners to provide high-level guidance where appropriate
- Consideration should be given to the provision of:
 - Further Change Management training/information on an organisation specific basis
 - Future detailed support with regards data management, optimised decision making and maintenance strategy when appropriate based on the progress from this mission. Data management (digital) is the highest longer-term priority to achieve the goals of Asset Management.
- There should be further examination of the potential collaboration between the ANSWC and WCAs with respect to the former as a bulk supplier